TABLE I

COMPARISON OF WHOLE BLOOD PLATELET COUNTS USING VARYING AMOUNTS OF BLOOD BY PROPOSED AND CENTRIFUGATION METHODS[1]

Whole Blood	*Saline (ml.)*	*Replicates*	*Mean Whole Blood Platelets (per c.mm.)*	*1 S.D.*	*Coefficient of Variation (%)*
20 c.mm.	2·5	10	207,440	6,900	3·3
40 c.mm.	2·5	10	212,730	8,500	4·0
0·1 ml.	2·5	10	219,730	5,000	2·3

[1]Mean of four replicate whole blood platelet counts on the same blood sample by the method of Eastham (1963) = 221,830 per c.mm. (Coefficient of variation of this method on 12 replicates = 5%.)

TABLE II

COMPARISON OF 20 ROUTINE WHOLE BLOOD PLATELET COUNTS BY CENTRIFUGATION AND PROPOSED SEDIMENTATION METHODS

Whole Blood Platelet Counts per c.mm.		*Percentage Difference from Centrifugation Method*
Centrifugation Method (Eastham, 1963)	*Proposed Simple Sedimentation Method*	
119,540	126,120	+ 5·5
176,220	159,130	− 9·7
181,160	163,250	− 9·9
189,780	192,940	+ 1·7
196,660	194,420	− 1·1
200,640	175,640	−12·5
203,620	209,100	+ 2·7
208,080	251,590	+20·9
211,060	197,670	− 6·3
213,560	217,210	+ 1·7
221,440	216,120	− 2·4
223,370	241,250	+ 8·0
229,250	213,530	− 6·9
235,060	222,670	− 5·3
243,110	225,750	− 8·4
248,900	239,350	− 3·8
253,960	234,060	− 7·8
269,130	257,030	− 4·5
295,120	282,810	− 3·8
436,440	392,610	−10·0

SUMMARY

A simple method for the separation of platelets from red cells without loss by sedimentation is described. The platelet-rich, red-cell-poor supernatant fluid is suitable for an accurate whole blood platelet count using an electronic particle counter. Only 20 c.mm. of blood is required for each count.

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Estimation of true glucose in blood by the AutoAnalyser

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The introduction of the new tubular flow cell has enforced changes in AutoAnalyser methods. This, with the new 'C' membrane, now permits estimation of glucose by a glucose oxidase method at a rate of 60 samples per hour and with a sample volume of about 0·1 ml.

The reagents are those of Discombe (1963) with a reduction in the concentration of o-dianisidine from 500 mg. per litre to 200 mg. per litre. All reagents must be filtered.

The flow diagram is altered as in Figure 1.

The principal advantages are the use of a single dialysis, greater economy in reagents, greater speed, and smaller samples. The sensitivity is increased to about 23 transmission lines for a 100 mg.% standard.

REFERENCE

Discombe, G. (1963). *J. clin. Path.*, **16**, 170.

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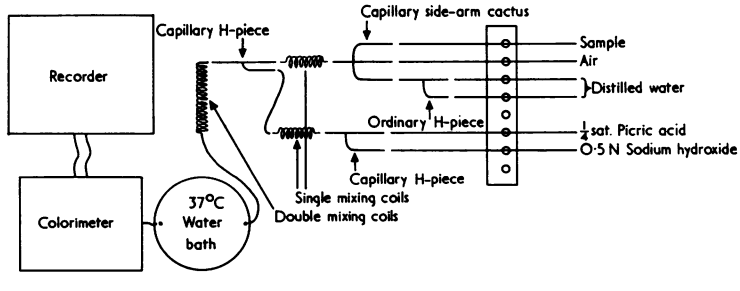

FIG. 1. *The flow diagram for the AutoAnalyser as used in the present method.*